I. LISTING OF CLAIMS:

This listing of claims is being provided for the Examiner's convenience. The claims are not being amended in this response.

Claim 1. (Previously Presented) A sustained release pharmaceutical formulation comprising (i) an active agent consisting of metformin or a pharmaceutically acceptable salt thereof, and (ii) a sustained release material, wherein said formulation provides therapeutic plasma levels of said metformin to a human patient over a 24 hour period after administration to said patient; and said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claims 2-3. (Cancelled)

Claim 4. (Previously Presented) The sustained release pharmaceutical formulation of claim 1 wherein said formulation provides a time to peak plasma concentration (T_{max}) of the metformin which occurs at a time from about 8 hours to about 12 hours after administration to said human patient.

Claim 5. (Cancelled)

Claim 6. (Previously Presented) A sustained release pharmaceutical formulation comprising (i)an active agent consisting of a dose of metformin or a pharmaceutically acceptable salt thereof suitable for once daily dosing, and (ii) a sustained release material, said formulation providing a T_{max} of the metformin which occurs at a time from about 8 hours to about 12 hours after administration to a human patient; and said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 7. (Cancelled)

Claim 8. (Previously Presented) A sustained release pharmaceutical formulation comprising (i)an active agent consisting of metformin or a pharmaceutically acceptable salt thereof, and (ii) a sustained release material, said formulation suitable for once daily dosing and providing a peak of a mean plasma concentration/time curve of metformin at a time from about 4 hours to about 10 hours after administration; and said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 9. (Previously Presented) A sustained release pharmaceutical formulation comprising (i)an active agent consisting of a dose of metformin or a pharmaceutically acceptable salt thereof suitable for once daily dosing, and (ii) a sustained release material, said formulation when administered with or after a meal to a human patient, providing a peak plasma concentration (C_{max}) of metformin from about 52.8% to about 75.1% of the C_{max} provided by an equivalent dose of metformin in an immediate release reference formulation; and said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 10. (Original) The sustained release pharmaceutical formulation of claim 9 wherein said formulation provides a T_{max} of the metformin which occurs at a time from about 8 hours to about 12 hours after administration to said human patient.

Claim 11. (Original) The sustained release pharmaceutical formulation of claim 9 wherein the bioavailability of the drug is increased by the presence of food.

Claim 12. (Previously Presented) A sustained release pharmaceutical formulation comprising (i) an active agent consisting of a dose of metformin or a pharmaceutically acceptable salt thereof suitable for once daily dosing, and (ii) a sustained release material, said formulation when administered with or after a meal to a human patient, providing a T_{max} of metformin from

about 182% to about 200% of the T_{max} provided by an equivalent dose of metformin in an immediate release reference formulation; and said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 13. (Original) The sustained release pharmaceutical formulation of claim 12 wherein said formulation provides a T_{max} of the metformin which occurs at a time from about 8 hours to about 12 hours after administration to said human patient.

Claim 14. (Original) The sustained release pharmaceutical formulation of claim 12 wherein the bioavailability of the metformin is increased by the presence of food.

Claim 15. (Previously Presented) A sustained release pharmaceutical formulation comprising (i) an active agent consisting of a dose of metformin or a pharmaceutically acceptable salt thereof suitable for once daily dosing, and (ii) a sustained release material, said formulation when administered in the fasted state to a human patient, providing a T_{max} of metformin from about 173% to about 215% of the T_{max} provided by an equivalent dose of metformin in an immediate release reference formulation; and said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 16. (Original) The sustained release pharmaceutical formulation of claim 15 wherein said formulation provides a T_{max} of the metformin which occurs at a time from about 8 hours to about 12 hours after administration to a human patient.

Claim 17. (Original) The sustained release pharmaceutical formulation of claim 15 wherein the bioavailability of the metformin is increased by the presence of food.

Claim 18. (Previously Presented) A sustained release pharmaceutical formulation comprising (i) an active agent consisting of a dose of metformin or a pharmaceutically acceptable salt

thereof suitable for once daily dosing, and (ii) a sustained release material, said formulation upon administration to a human patient, providing a width at 50% of the height of a mean plasma concentration/time curve from about 6 hours to about 12 hours; and said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 19. (Original) The sustained release pharmaceutical formulation of claim 18 wherein said formulation provides a T_{max} of the metformin which occurs at a time from about 8 hours to about 12 hours after administration.

Claims 20. (Original) The sustained release pharmaceutical formulation of claim 18 wherein the bioavailability of the metformin is increased by the presence of food.

Claims 21-23. (Cancelled)

Claim 24. (Previously Presented) A sustained release pharmaceutical formulation comprising (i) an active agent consisting of a dose of metformin or a pharmaceutically acceptable salt thereof, and (ii) a sustained release material, that exhibits the following dissolution profile when tested in a United States Pharmacopeia (USP) type 2 apparatus at 75 rpm in 900 ml of simulated intestinal fluid (pH 7.5 phosphate buffer) and at 37° C.:
after 2 hours 0-25% of the metformin or salt thereof is released;
after 4 hours 10-45% of the metformin or salt thereof is released;
after 8 hours 30-90% of the metformin or salt thereof is released;
after 12 hours not less than 50% of the metformin or salt thereof is released;
after 16 hours not less than 60% of the metformin or salt thereof is released;
and after 20 hours not less than 70% of the metformin or salt thereof is released; and wherein after administration to a human patient, said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 25. (Previously Presented) The sustained release pharmaceutical formulation of claim 24 wherein after administration to the human patient, said formulation provides a biovailability of metformin which is increased by the presence of food.

Claim 26. (Original) The sustained release pharmaceutical formulation of claim 24 wherein after administration to a human patient, said formulation provides a T_{max} of metformin which occurs at a time from about 8 hours to about 12 hours after said administration.

Claim 27. (Previously Presented) A sustained release pharmaceutical formulation comprising (i) an active agent consisting of a dose of metformin or a pharmaceutically acceptable salt thereof and (ii) a sustained release material, that exhibits the following dissolution profile when tested in a USP type 2 apparatus at 75 rpm in 900 ml of simulated intestinal fluid (pH 7.5 phosphate buffer) and at 37° C.:
after 2 hours 0-15% of the metformin or salt thereof is released;
after 4 hours 20-40% of the metformin or salt thereof is released;
after 8 hours 45-90% of the metformin or salt thereof is released;
after 12 hours not less than 60% of the metformin or salt thereof is released;
after 16 hours not less than 70% of the metformin or salt thereof is released;
and after 20 hours not less than 80% of the metformin or salt thereof is released; and wherein after administration to a human patient, said formulation providing an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 28. (Previously Presented) The sustained release pharmaceutical formulation of claim 27 wherein after administration to the human patient, said formulation provides a bioavailability of metformin which is increased by the presence of food.

Claim 29. (Original) The sustained release pharmaceutical formulation of claim 27 wherein after

administration to a human patient, said formulation provides a T_{max} of metformin which occurs at a time from about 8 hours to about 12 hours after said administration.

Claim 30. (Previously Presented) The sustained release pharmaceutical formulation of claim 1 wherein said metformin or pharmaceutically acceptable salt thereof is metformin hydrochloride.

Claim 31. (Previously Presented) A sustained release once a day oral solid dosage form of metformin, comprising (i) an active agent consisting of an effective amount of metformin or a pharmaceutically acceptable salt thereof and one or more materials controlling the release of metformin from the dosage form such that said dosage form, when orally administered on a once a day basis to a human in the presence of food, therapeutic levels of said metformin are attained in said human for 12 to 24 hours, and said dosage form does not exhibit a decrease in the bioavailability of metformin if taken with food.

Claim 32. (Previously Presented) The sustained release dosage form of claim 31, which provides an increase in the bioavailability of said metformin if taken with food.

Claim 33. (Previously Presented) A method of treating a human diabetic patient with an oral solid dosage form of metformin, comprising:

swallowing on a once a day basis in the presence of food an intact controlled release oral dosage form containing (i) an active agent consisting of an effective amount of metformin or a pharmaceutically acceptable salt thereof and one or more materials controlling the release of metformin from the dosage form such that therapeutic levels of said metformin are attained in said human for 12 to 24 hours and a decrease in the bioavailability of metformin is not exhibited.

Claim 34. (Cancelled)

Claim 35. (Previously Presented) A method of treating diabetes in humans, comprising:

swallowing on a once a day basis in the presence of food an intact controlled release solid oral dosage form containing (i) an active agent consisting of a therapeutically effective metformin or a pharmaceutically acceptable salt thereof, and (ii) a sustained release material, such that therapeutic plasma levels of metformin are attained in said human over the dosing interval and (i) a decrease in the bioavailability of metformin is not exhibited relative to administration of the dosage form in the fasting state; or (ii) an increase in the bioavailability of metformin is exhibited relative to administration of the dosage form in the fasting state.

Claim 36. (Previously Presented) The method of claim 35, further comprising administering said dosage form with or shortly after an evening meal.

Claim 37. (Previously Presented) The method of claim 35, wherein an increase in the AUC is exhibited as compared with administration in the fasting state.

Claim 38. (Previously Presented) The sustained release dosage form of claim 31, which provides an AUC which is increased by the presence of food as compared with administration in the fasting state.

Claim 39. (Previously Presented) The method of claim 33, wherein an increase in the AUC is exhibited as compared with administration in the fasting state.